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ABSTRACT

A graph processor for a hardware database is described which is operable to manipulate, such as reading, writing, or altering, information in a database, or other collection of information. The graph processor includes a read engine and a write engine, the read engine operable to compare the search object against the information in the database and return results based on the comparison. The write engine is operable to write new information into the database by first locating the first differential bit between the information to be written and the existing contents of the database. Once the differential bit has been located the write engine creates a new branch and inserts the data into the database.